WHAT IS CLAIMED IS:

1. A magnetic memory, comprising:
a magnetic memory stack;
a first line adjacent the magnetic memory stack;
a second line crossing the first line; and
a third line crossing the first line and the second line, angled relative to the first line and the second line, where the first line, the second line and the third line are configured to produce magnetic fields that set states of the magnetic memory stack.

2. The magnetic memory of claim 1, where the first line is orthogonal to the second line.

3. The magnetic memory of claim 1, where the magnetic memory stack has an easy axis and the first line is aligned to produce one of the magnetic fields along the easy axis.

4. The magnetic memory of claim 3, where the first line is orthogonal to the second line.

5. The magnetic memory of claim 1, where the first line is adjacent a side of the magnetic memory stack and the second line is adjacent an opposing side of the magnetic memory stack.

6. The magnetic memory of claim 1, where the first line is adjacent a side of the magnetic memory stack and the third line is adjacent an opposing side of the magnetic memory stack.

7. The magnetic memory of claim 1, where the magnetic memory stack includes a sense conductor.

8. A magnetic memory, comprising:

a magnetic memory stack;

a first line adjacent the magnetic memory stack;

a second line crossing the first line at the magnetic memory stack; and

a third line crossing the first line and the second line at the magnetic memory stack, where electrical currents applied to the first line, the second line and the third line create a first magnetic field, a second magnetic field and a third magnetic field, and the third magnetic field adds to the first magnetic field and the second magnetic field to set states of the magnetic memory stack.

9. The magnetic memory of claim 8, where the first line is orthogonal to the second line.

10. The magnetic memory of claim 8, where the magnetic memory stack includes a sense layer having an easy axis and the first line is aligned to produce the first magnetic field along the easy axis.

11. The magnetic memory of claim 8, where the magnetic memory stack includes a sense layer having an easy axis and a hard axis and the first line is aligned to produce the first magnetic field along the easy axis and the second line is aligned to produce the second magnetic field along the hard axis.

12. A magnetic memory, comprising:

an array of magnetic memory cells;

first lines crossing the array of magnetic memory cells;

second lines crossing the first lines at magnetic memory cells in the array of magnetic memory cells; and

third lines crossing the first lines and the second lines at the magnetic memory cells in the array of magnetic memory cells and angled relative to the first lines and the second lines, where the first lines and the second lines and the third lines are configured to produce magnetic fields that cooperate to switch states of the magnetic memory cells in the array of magnetic memory cells.

13. The magnetic memory of claim 12, where the third lines cross each of the magnetic memory cells in a diagonal across the array of magnetic memory cells.

14. The magnetic memory of claim 12, where the third lines cross only one of the magnetic memory cells.

15. The magnetic memory of claim 12, where electrical current passed through one of the first lines, one of the second lines and one of the third lines produces a first magnetic field, a second magnetic field and a third magnetic field in an intersecting magnetic memory cell, and produces only the first magnetic field, only the second magnetic field or only the third magnetic field in non-intersecting magnetic memory cells.

16. A magnetic memory, comprising:
an array of magnetic memory cells;
first lines crossing the array of magnetic memory cells;
second lines crossing the first lines; and
third lines crossing the first lines and the second lines, where write currents passed through one of the first lines, one of the second lines and one of the third lines create a first magnetic field, a second magnetic field and a third magnetic field, and the third magnetic field includes components aligned with the first magnetic field and the second magnetic field to set states of an intersecting magnetic memory cell in the array of magnetic memory cells.

17. The magnetic memory of claim 16, where the third lines cross magnetic memory cells in a diagonal across the array of magnetic memory cells.

18. The magnetic memory of claim 16, where the third lines cross only one magnetic memory cell in the array of magnetic memory cells.

19. The magnetic memory of claim 16, where only the first magnetic field, only the second magnetic field and only the third magnetic field are created in non-intersecting magnetic memory cells.

20. A magnetic memory, comprising:

a magnetic memory stack including a sense layer;

a first line crossing the magnetic memory stack;

a second line crossing the first line at the magnetic memory stack; and

a third line crossing the first line and the second line at the magnetic memory stack, angled relative to the first line and the second line, where the first line, the second line and the third line are located close enough to the sense layer to produce magnetic fields that set states in the sense layer.

21. A magnetic memory, comprising:

a magnetic memory stack;

means for generating a first magnetic field in the magnetic memory stack;

means for generating a second magnetic field in the magnetic memory stack; and

means for generating a third magnetic field in the magnetic memory stack, where the first magnetic field, the second magnetic field and the third magnetic field combine to set states of the magnetic memory stack.

22. The magnetic memory of claim 21, where the combination of the first magnetic field, the second magnetic field and the third magnetic field provides a larger write margin in the magnetic memory stack, as compared to the combination of any two of the first magnetic field, the second magnetic field and the third magnetic field.

23. The magnetic memory of claim 21, where the first magnetic field is along the easy axis of the magnetic memory stack and the second magnetic field is along the hard axis of the magnetic memory stack.

24. The magnetic memory of claim 21, where the first magnetic field is aligned between the easy axis and the hard axis of the magnetic memory stack.

25. A method for writing a magnetic memory cell in an array of magnetic memory cells, the method comprising supplying write currents to three crossing conductors to create three magnetic fields in the magnetic memory cell.

26. The method of claim 25, where the magnetic fields around two conductors are orthogonal.

27. The method of claim 25, where the magnetic memory cell has an easy axis and one of the magnetic fields aligns with the easy axis.

28. The method of claim 25, where the write currents create a first magnetic field, a second magnetic field and a third magnetic field in the magnetic memory cell, and only the first magnetic field, only the second magnetic field and only the third magnetic field in non-intersecting magnetic memory cells.

29. A method for improving write margin and half-select margin in a magnetic memory including supplying write currents to crossing first lines, second lines and third lines, where the first lines, the second lines and the third lines are angled relative to one another.